

Remarks

The Applicants have amended Claims 11, 16 and 17 to recite that the amount of C in solution is 0.0079 to 0.0415% by mass. Support may be found in the Applicants' specification as follows. Referring to Tables 2-1 and 2-2, it can be seen that there are a series of examples including the amount of fixed C as represented by C_{fix} (%). This is, of course, the amount of fixed C that is not in solution and is a percentage based on the total amount of carbon (C_{total}) in the steel. The remainder of C in the steel is C in solution (C_{sol}). In other words, $C_{\text{total}} - C_{\text{fix}} = C_{\text{sol}}$.

Then, referring specifically to Examples 17 and 18, it can be seen that the fixed percentage of C is 21. Then, referring to Example 35, it can be seen that the amount of fixed C is 17%. This means that the amounts of C in solution, *i.e.*, C_{sol} is 79% and 83%, respectively.

Then, looking at the claimed range of C_{total} which is recited as being about 0.010 to about 0.050, if the minimum amount of total C at 0.010 is multiplied by the amount of C in solution taken from the examples such as Example 17 and 18, it can be seen that the total amount of C multiplied by the percentage of C in solution provides an actual amount of C that is in solution for those examples. As an example, when 0.01 is multiplied by 79%, the amount of actual C in solution is 0.0079%. On the other hand, if the upper amount of total C at 0.05% is multiplied by the amount of percentage of C in solution from Example 35, it can be seen that the total amount of C is 0.0415 wt%.

Then, referring to Fig. 1 of the Declaration of Mr. Okuda submitted in the Response dated September 14, 2009, it can be seen that the Applicants' C in solution ranges from 0.0079% on the graph up to just in excess of 0.04% (specifically 0.0415%) as shown in that graph. Thus, this weight percentage of C in solution is within the unexpected results as described and shown in the Okuda Declaration.

Referring specifically to the Examiner's helpful comments in the Advisory Action, it was noted that the amount of C in solution is not recited in the claims. However, the Applicants respectfully submit that the amount of C in solution is now recited in the claims and supported by the specification as originally filed through the range of total carbon and the many examples showing the amount fixed carbon which is easily calculated based on that original disclosure into the amount of C in solution and the amount of C present in weight percentage.

The Applicants therefore respectfully submit that they have factually established that there is a completely unexpected result over JP '941. Withdrawal of the rejection is accordingly respectfully requested.

The Applicants enclose a Request for Continued Examination along with this Response and respectfully request that this Response, as well as the Response filed on September 14, 2009 be entered into the official file and considered on the merits.

In light of the foregoing, the Applicants respectfully submit that the entire application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,



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